



# 200 Series Regulators

# 203 SERIES

The 203 Series regulators deliver non-corrosive, high purity or liquefied gases (up to grade 4.5) for applications requiring constant low pressure control from low inlet pressure sources below 200 PSIG. With delivery pressures as low as 0.1 PSIG (7 mBAR) that can be adjusted in 0.05 to 0.1 PSIG (4 to 7 mBAR) increments in two delivery pressure ranges, the 203 satisfies any high purity application requiring atmospheric pressures below 5 PSIG (350 mBAR).

- Single Stage
- Chrome-Plated Forged Brass Body
- 316L Stainless Steel Diaphragm
- Four or Five Port Configuration



203 1001-000 shown

## Typical Applications

- Low pressure inert blanketing of chemicals and fuel tanks
- Gas supply purging
- Gas system charging
- Fuel gas supply control
- Calibration gas control

## Features

- CAPSULE® Seat**  
Increased serviceability and life
- 316L Stainless Steel Diaphragm**  
No inboard diffusion
- Forged Body**  
Durable, long-lasting construction
- Large Convoluted Diaphragm**  
Stable pressure control
- Standard Relief Valve**  
Diaphragm and gauge protection
- Chrome-Plated Forged Brass Body**  
High purity design
- Substantial Flow Capacity at Low Outlet Pressure**  
Supply multiple user locations
- Pressure Ranges 0.05-2.0 to 0.1-5.0 PSIG (4-140 mBAR to 7-350 mBAR)**  
Excellent pressure control in 0.05 to 0.1 PSIG (4 to 7 mBAR) increments
- 200 PSIG (14 BAR) Inlet Pressure Rating**  
Low inlet pressure gases or low line pressure inlet

## Materials

- Body**  
Chrome-plated forged brass
- Bonnet**  
Chrome-plated die-cast zinc
- Seat**  
PTFE
- Filter**  
10 micron sintered bronze
- Diaphragm**  
316L stainless steel
- Internal Seals**  
PTFE

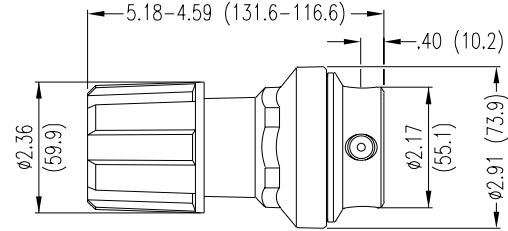
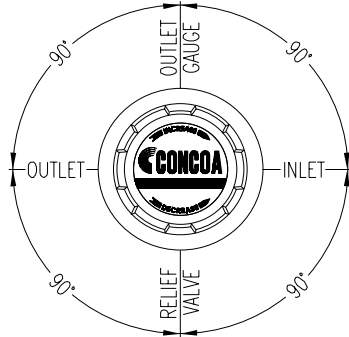
## Specifications

- Maximum Inlet Pressure**  
200 PSIG (14 BAR)
- Temperature Range**  
-40°F to 140°F (-40°C to 60°C)
- Gauges**  
**Inlet (optional):** 2 1/2" (68mm) diameter chrome-plated brass  
**Outlet:** 2 1/2" (68mm) diameter steel case with brass connection
- Ports**  
1/4" FPT
- Helium Leak Integrity**  
1 x 10<sup>-8</sup> scc/sec
- Cv**  
0.02
- Weight (0 2021-000)**  
3.2 lbs. (1.44 kg)

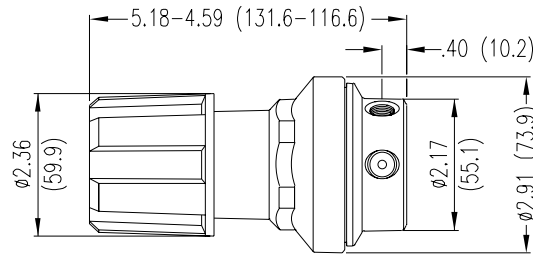
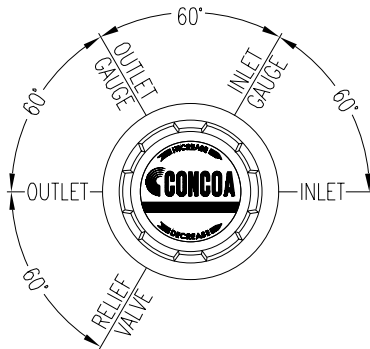
# 200 Series Regulators



## Installation Dimensions



Four port configuration



Five port configuration

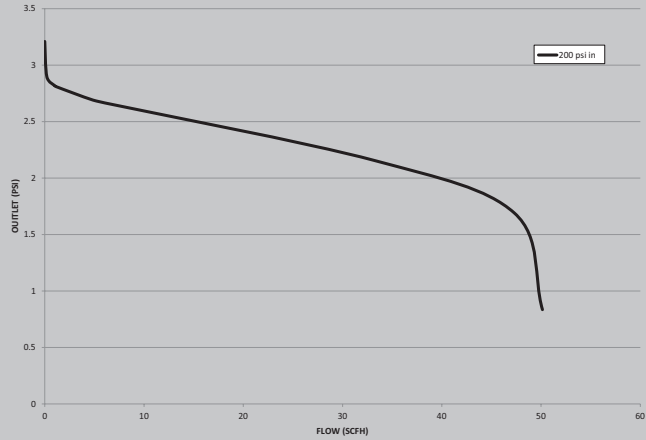
REGULATORS

## Ordering Information

203	A	B	C	D	-CON	
Series 203	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly Gauges	Inlet Connections
	<b>1:</b> 0-2 PSIG (0-140 mBAR)	0-5 PSIG/ 0-350 mBAR	<b>0:</b> None	<b>0:</b> 1/4" FPT port	<b>0:</b> Four port bare body	<b>000:</b> 1/4" FPT
	<b>2:</b> 0-5 PSIG (0-350 mBAR)	0-10 PSIG/ 0-700 mBAR	<b>6:</b> 0-400 PSIG/ 0-27 BAR	<b>1:</b> 1/4" MPT	<b>1:</b> Four port standard assembly (PSIG/kPa gauges)	<b>TF2:</b> 1/8" tube
			<b>7:</b> 0-200 PSIG/ 0-14 BAR	<b>2:</b> 1/4" tube fitting	<b>2:</b> Four port standard assembly (BAR/PSIG gauges)	<b>TF4:</b> 1/4" tube
				<b>3:</b> Diaphragm valve 1/4" tube fitting	<b>A:</b> Five port bare body	<b>TF6:</b> 3/8" tube
				<b>4:</b> Diaphragm valve 1/4" MPT	<b>B:</b> Five port standard assembly (PSIG/kPa gauges)	<b>M06:</b> 6mm tube
				<b>5:</b> Needle valve 1/4" MPT	<b>C:</b> Five port standard assembly (BAR/PSIG gauges)	CGA DIN 477 BS 341 and others available
				<b>6:</b> 1/8" tube fitting		
				<b>7:</b> 3/8" tube fitting		
				<b>8:</b> Diaphragm valve 1/8" tube fitting		
				<b>9:</b> Diaphragm valve 1/4" FPT		
				<b>A:</b> 3/8" BSP RH fitting		
				<b>B:</b> Diaphragm valve 3/8" tube fitting		
				<b>C:</b> 3/8" BSP LH fitting		
				<b>D:</b> 6mm brass hose barb (Not available if A=4 or 5)		
				<b>G:</b> 1/8" stainless steel tube fitting		
				<b>H:</b> 1/4" stainless steel tube fitting		
				<b>M:</b> 6mm tube fitting		
				<b>S:</b> Diaphragm valve 6mm tube fitting		

# Flow Curves for 203

3 PSIG (0.2 BAR) Outlet



5 PSIG (0.3 BAR) Outlet

